

Material Declaration Report



Package Type:	TQFN 42L (9.0x3.5mm)
Pericom Package Code:	ZH42(Pb-free)
RoHS Compliance:	Yes
Applicable Exemption:	N/A

Component Weight (mg):	78.370
Termination Plating:	NiPdAu
JESD 97 Pb-free Category:	e4
Plating Thickness (um):	0.5-2.2
Tin Whisker Mitigation:	N/A

MSL Rating:	1
Peak Body Temp (C):	260
Max Time (sec):	30
Reflow Cycles:	3
Rev Date:	1/22/2009

Homogeneous Material Declaration

MATERIAL ITEM	MATERIAL WEIGHT(mg)	ASSEMBLY SUBCON	MATERIAL COMPOSITION	CAS NO.	COMPOSITION %	COMPOSITION WEIGHT(mg)
MOLD COMPOUND	34.431	UTL / Unisem-China	Carbon black	1333-86-4	0.500	0.1722
			Epoxy resin	Proprietary	4.500	1.5494
			Phenol resin	Proprietary	4.500	1.5494
			Silica fuse	60676-86-0	90.500	31.1601
		SPEL	Carbon Black	1333-86-4	0.100	0.0344
			Epoxy Resin-1	Proprietary	1.750	0.6025
			Epoxy Resin-2	Proprietary	1.750	0.6025
			Epoxy Resin-3	Proprietary	1.750	0.6025
			Others Non-hazardous Material	Proprietary	1.000	0.3443
			Phenol resin	Proprietary	3.500	1.2051
Silica	60676-86-0	90.150	31.0395			
LEADFRAME	39.841		Copper	7440-50-8	96.953	38.6271
			Gold	7440-57-5	0.007	0.0029
			Iron	7439-89-6	2.350	0.9363
			Nickel	7440-02-0	0.473	0.1883
			Palladium	7440-05-3	0.041	0.0163
			Phosphorus	7723-14-0	0.065	0.0259
			Zinc	7440-66-6	0.111	0.0441
SILICON DIE	1.903		Silicon (Si)	7440-21-3	99.192	1.8876
			Non-hazardous Metal	Proprietary	0.808	0.0154
DIE ATTACH EPOXY	1.208	UTL	Acrylate Resin	Proprietary	16.000	0.1933
			Heterocyclic organic compound	Proprietary	2.000	0.0242
			Silver	7440-22-4	80.000	0.9664
			Treated Silica	Proprietary	2.000	0.0242
		Unisem-China	Silver	7440-22-4	80.000	0.9664
			Trade Secret-10123	Proprietary	15.000	0.1812
			Trade Secret-10123	Proprietary	5.000	0.0604
		SPEL	Dicyandamide	461-58-5	0.500	0.0060
			Diluent	26447-14-3	6.000	0.0725
			Epoxy Resin	9003-36-5	10.000	0.1208
Hardener	620-92-8	3.500	0.0423			
Silver	7440-22-4	80.000	0.9664			
GOLD WIRE	0.987		Gold(Au)	7440-57-5	99.990	0.9869
			Impurities	-	0.010	0.0001

NOTE: The device contents disclosed are approximated and are based on engineering estimates.

3rd Party Analysis Results (PPM)

MATERIAL	Pb	Hg	Cr+6	Cd	PBB	PBDE
Mold Compound	<2	<2	<2	<2	<5	<5
Leadframe	<50	<2	<2	<2	<5	<5
Device						
Silicon Die	<2	<2	<2	<2	<5	<5
Die Attach Epoxy	<2	<2	<2	<2	<5	<5
Gold Wire	<2	<2	<2	<2	<5	<5
Solder Plating	<2	<2	<2	<2	<5	<5

ROHS MATERIAL COMPOSITION DECLARATION

EU RoHS Directive 2002/95/EC and China RoHS Directive SJ/T11363-2006	Declaration Statement: Quantity limit of 0.1% (1000 PPM) by mass in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium(Cr+6), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE); and Quantity limit of 0.01% (100 PPM) for Cadmium																	
	<table border="1"> <thead> <tr> <th>Pb</th> <th>Hg</th> <th>Cr+6</th> <th>Cd</th> <th>PBB</th> <th>PBDE</th> </tr> </thead> <tbody> <tr> <td><1000ppm</td> <td><1000ppm</td> <td><1000ppm</td> <td><100ppm</td> <td><1000ppm</td> <td><1000ppm</td> </tr> <tr> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> <td>O</td> </tr> </tbody> </table>	Pb	Hg	Cr+6	Cd	PBB	PBDE	<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm	O	O	O	O	O
Pb	Hg	Cr+6	Cd	PBB	PBDE													
<1000ppm	<1000ppm	<1000ppm	<100ppm	<1000ppm	<1000ppm													
O	O	O	O	O	O													
<p>O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006. X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.</p>																		